

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P554402

Luminaire Tested: **FUSL-12-2-LD4-1STD-30-UNV-93-85-EDD-90**

Issue Date: 7/16/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P554402
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-12-2-LD4-1STD-30-UNV-93-85-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

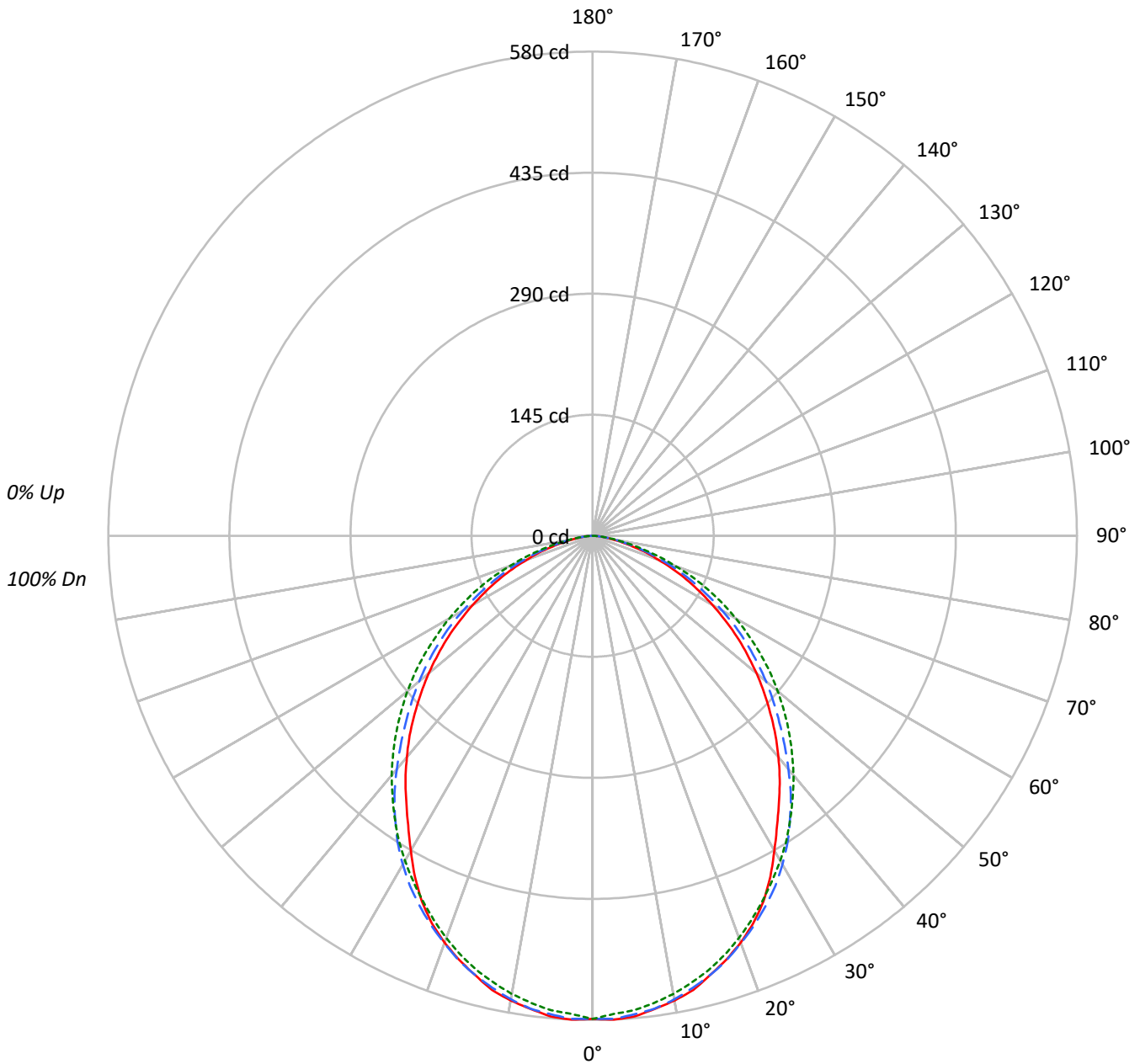
Lumens per Lamp: N/A
Luminaire Lumens: 1338.0 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3115	3115	3115
5°	3123	3109	3083
10°	3089	3081	3046
15°	3034	3034	3000
20°	2970	2974	2936
25°	2872	2908	2862
30°	2705	2826	2792
35°	2556	2710	2713
40°	2432	2563	2630
45°	2293	2407	2531
50°	2146	2269	2423
55°	1980	2111	2292
60°	1783	1927	2132
65°	1574	1713	1940
70°	1312	1459	1648
75°	1031	1164	1289
80°	738	821	908
85°	482	482	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.5	4.1
10°-20°	153.1	11.4
20°-30°	223.7	16.7
30°-40°	253.9	19.0
40°-50°	245.1	18.3
50°-60°	202.2	15.1
60°-70°	134.6	10.1
70°-80°	60.2	4.5
80°-90°	10.8	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	431.2	32.2
0°-40°	685.1	51.2
0°-60°	1132.3	84.6
0°-90°	1338.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1338.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	579	579	579	579	579	
5°	578	578	576	572	571	55
15°	545	546	545	542	538	154
25°	484	488	490	486	482	222
35°	389	394	412	415	413	244
45°	301	306	316	331	333	232
55°	211	214	225	237	244	188
65°	124	127	134	144	152	123
75°	50	52	56	59	62	54
85°	8	8	8	7	7	10
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	578.7	578.7	578.7	578.7	578.7
2.5°	580.2	580.4	579.1	575.5	573.3
5°	578.0	577.8	575.5	572.4	570.6
7.5°	571.5	572.0	571.3	566.9	564.4
10°	565.3	565.5	563.8	560.2	557.3
12.5°	557.3	557.1	554.6	552.9	548.2
15°	544.6	546.0	544.6	542.2	538.4
17.5°	532.4	532.4	533.3	529.1	526.2
20°	518.6	519.3	519.3	516.0	512.6
22.5°	502.6	504.6	505.3	501.7	497.7
25°	483.7	487.5	489.7	486.2	481.9
27.5°	460.8	466.6	473.3	470.6	465.9
30°	435.3	443.7	454.8	452.6	449.3
32.5°	411.0	419.5	434.8	433.9	432.2
35°	389.0	394.4	412.4	414.6	413.0
37.5°	368.1	373.0	389.9	395.0	393.7
40°	346.1	351.5	364.8	373.9	374.4
42.5°	324.3	329.5	340.3	353.5	353.5
45°	301.2	306.3	316.3	330.8	332.6
47.5°	278.5	283.9	293.7	308.1	311.0
50°	256.3	261.2	271.0	285.0	289.4
52.5°	233.2	238.5	248.1	261.0	267.4
55°	211.0	214.5	225.0	237.4	244.3
57.5°	187.8	191.2	203.0	213.6	220.7
60°	165.6	169.8	179.0	189.8	198.1
62.5°	144.3	148.7	156.5	166.1	175.4
65°	123.6	126.9	134.5	144.1	152.3
67.5°	103.6	106.5	114.0	120.7	129.4
70°	83.4	87.1	92.7	99.1	104.7
72.5°	67.1	68.7	73.4	78.0	83.8
75°	49.6	52.2	56.0	58.7	62.0
77.5°	35.6	37.1	39.3	41.6	44.7
80°	23.8	24.5	26.5	26.9	29.3
82.5°	14.4	14.9	15.3	15.6	16.5
85°	7.8	7.8	7.8	7.3	7.3
87.5°	4.4	4.4	3.8	3.1	2.2
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)